



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

in collections in Jerusalem, which have been assigned to Phœnician origin, and to others brought from Cyprus; also to the more ancient of the Cypriote pottery which I had seen in the British Museum and the Louvre, as well as in the celebrated Di Cesnola collection in the American Museum, New York.

The cinerary urn, only the fragments of which have been seen by me, is of the same description of earthenware as the tear-bottles or vases, but is of a redder color. It is remarkably thin and fragile in proportion to its size, being about one-eighth of an inch thick.

All who have seen the tomb here described, and who are of experience in such antiquities, unhesitatingly assign it to the Canaanitish or Jebusite period. There can be no doubt as to its great age.

It is insisted on by many that this discovery largely favors the belief that the true sites of Calvary and the tomb of Christ are not those generally accepted, but are identical with the high knoll at the Cave of Jeremiah and the tomb in the garden near by, outside the walls of Jerusalem, near the Damascus Gate, they arguing that the Jews would never have selected as a place of interment a Jebusite or Canaanitish burial-place.

Though this may not be considered as conclusive, the facts here given may be regarded not only as interesting and valuable, but as forming an additional link in the chain of evidence slowly but surely encircling this important subject, and about which I shall have more to say anon, having accumulated thereupon much curious and determinative material, but with which I am not prepared to deal at present. Among the testimony I include the wonderful, massive, and extensive Roman pavements recently brought to light in this city, and which have bearings on the case of unquestionable and significant character.—*Henry Gillman, U. S. Consul, Jerusalem, Palestine.*

MICROSCOPY.*

Albuminized-Felt Tablets for Mounting Anatomical Preparations.—Anatomical preparations are usually exhibited mounted on plates of glass, wax, or wood, in alcohol. For many objects—*e.g.*, whole animals—glass plates are excellent mounting-tablets, but they do not serve this purpose well in the case of delicate preparations, such as the internal organs of insects, molluscs, etc. Wood or wax tablets are generally employed when the parts of the preparation require to be fixed in place by pinning; but these tablets are objectionable, inasmuch as they are attacked by alcohol.

* Edited by C. O. WHITMAN, Milwaukee, Wisconsin.

H. Dewitz¹ recommends felt tablets prepared in the following manner:

1. Pour the white of eggs, after separation from the yolks, into shallow plates, covering the bottom of each with a *thin* layer. Keep in a warm place for a few days, until the white becomes quite thick. If it is not to be used at once, let it dry completely, and then dissolve in cold water whenever needed.

2. Take a piece of fine, white wool-felt, of any desired size, and completely saturate it, by pressing and kneading, with the thickened (or dissolved) preparation of white.

3. Take two plates of thick window-glass, a little larger than the felt; warm them over a spirit-lamp, and smear one side of each with white wax,² rubbing the surface well with the finger in order to make the coat of wax thin and even. When the wax is cool, place the piece of albuminized felt between the glass plates, in contact with the waxed sides; and then bind them together with a string so closely that no layer of air is left between the felt and the layer of wax. Plunge the whole several times into boiling water (thus avoiding breakage through too rapid expansion); then leave it in the water (kept boiling) for a quarter of an hour. After cutting the string the glass plates are easily removed, leaving the felt tablet ready for cutting to the size and shape required.

4. The tablets thus prepared should be kept in ninety-five per cent. alcohol. Before use they may be soaked a few hours in water, in case they are too hard for the use of quills or spines as pins. It is not advisable to use the tablets immediately after boiling, as they only attain a proper degree of hardness after lying several days in ninety-five per cent. alcohol.

Colored tablets may be made by mixing coloring-substances with the prepared white. It is necessary, however, to select for this purpose substances that do not lose their color in alcohol. Lampblack may be used for black, ochre for yellow, cinnabar and vermilion for red.

The white tablets present a better appearance if they are treated with corrosive sublimate before being placed in ninety-five per cent. alcohol. The finished tablets may be stained with hæmatoxylin; but they must first be placed in boiling water to free them from any traces of wax. The stain with hæmatoxylin is often imperfect, and is therefore not to be recommended. Dewitz prefers ochre to any of the other coloring-substances above named.

After saturation with colored white it is well to sprinkle the tablet with the coloring-powder, and rub it in with the finger before bringing the tablet between the glass plates.

The foregoing method of procedure may be varied so as to

¹ Zool. Anz., x., No. 256, p. 392, 1887.

² Instead of wax, a thin layer of collodion may be used.

give the white a leathery consistency. After the piece of felt has been thoroughly saturated with colored white and sprinkled freely with the coloring-powder, as before described, it is spread out on a clean glass plate and pressed down so as to leave no air-bubbles between it and the glass. It is then left to dry at ordinary room temperature. When completely dry it is removed from the glass and covered with a thin collodion solution. As soon as the collodion coat is dry the tablet is thrown into boiling water and kept below the surface by weighting for fifteen minutes. Black tablets colored with lampblack should always be made in this way, as they generally appear flecked when made by the first method.

The Reduction of Chromic Solutions in Animal Tissues corrected by Reoxidation with H_2O_2 .—It is well known that the brownish-green color assumed by animal tissues under exposure to chromic solutions is due to a combination of the oxide of chromium (Cr_2O_3) with CrO_3 . There is a partial reduction of the chromic acid in the tissues, resulting in the formation of Cr_2O_3 , which then unites with the remaining CrO_3 , to form the compound known as chromic chromate (chromsaure Chromoxyd). P. G. Unna¹ has shown that the greenish color can be removed by treating the tissues with hydrogen dioxide.

Unna explains the chemical processes involved in the following manner: "If a solution of chromic acid or bichromate of potassium be mixed with a solution of H_2O_2 , a deep green precipitate of chromoxide (Cr_2O_3) is immediately formed, which combines with the remaining chromic acid to form the intermediate salt (chromic chromate) with a brownish-green color. If the mixture is left to itself, the process of reduction, after reaching a definite point, changes to one of oxidation, and the chromic chromate is soon reoxidized, leaving the solution yellow as at first. . . .

"The same phenomenon is seen when (1) sections colored by chromic acid or bichromate of potassium are placed in H_2O_2 , or when (2) sections treated with H_2O_2 are immersed in the chromic solutions. The sections at once become dark green, then brownish-green, and, finally, in the first case yellow, in the second colorless.

"If the sections, at the moment when the brownish-green color appears, are removed from the solution and thoroughly washed, the color of the chromic chromate, which is not unimportant for many histological details, remains fixed."

¹ Archiv f. mik. Anat., xxx., H. I, p. 47, 1887; Cf. Monatsheft f. prakt. Dermat., ii. p. 31.